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10/519,626	12/28/2004	Klaus Hoffmann	2002P10560WOUS	2535

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EXAMINER	
MATTIS, JASON E	
ART UNIT	**PAPER NUMBER**
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,626	HOFFMANN, KLAUS	
	Examiner	Art Unit	
	JASON E. MATTIS	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the Amendment filed 1/22/09. Due to the claim amendments, the previous rejections under 35 U.S.C. 112 second paragraph have been withdrawn. Claims 1-9 have been canceled. Claims 10-29 are currently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 10-13 and 15-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabipour et al. (U.S. Pat. 6011846) in view of Kirla et al. (WO 01/45291 A1) and Tahernezhaadi et al. (U.S. Pat. 6785339 B1).

With respect to claim 10, Rabipour et al. discloses a method for switching off an echo compensation for a data connection when a packet delay time is reduced **(See the abstract and Figure 3 of Rabipour et al. for reference to determining whether to perform echo suppression based on a delay time)**. Rabipour et al. also discloses establishing a threshold value of a data transmission time that is a lower limit for

switching off the echo compensation **(See column 5 line 65 to column 6 line 11 and Figure 3 of Rabipour et al. for reference to establishing an echo threshold delay that is a lower limit for determining whether to apply echo suppression or not).** Rabipour et al. further discloses a data connection change triggering the change of the data transmission time **(See column 5 lines 29-44 of Rabipour et al. for reference to continuously determining the echo delay D(k) of a frame such that any change in network delay time do to a connection change is determined and compared to the echo threshold delay to determine whether to turn off echo suppression)**. Rabipour et al. also discloses determining the data transmission time of the changed connection **(See column 6 line 65 to column 7 line 11 and Figure 3 of Rabipour et al. for reference to determining and sending a current echo delay to an echo suppression device)**. Rabipour et al. further discloses checking if the transmission time of the changed connection falls below the threshold value when echo compensation is switched on, informing a control device that the time fell below the threshold, and switching off the echo compensation **(See column 5 lines 29-44, column 6 line 65 to column 7 line 11, and Figure 3 of Rabipour et al. for reference to determining a change in the delay time of a connection, signaling the current echo delay time to a echo suppression device, comparing the current echo delay time to the threshold echo delay time and passing a current frame unchanged, meaning echo suppression has been turned off, if the current echo delay time is below the threshold echo delay time)**. Rabipour et al. does not disclose the method

being performed in a packet network including signaling between a gateway and a control device.

With respect to claim 11, Rabipour et al. discloses informing an echo suppression device when there is a change in the data connection which causes the data transmission time to fall below the threshold value **(See column 3 lines 33-54 and column 5 lines 29-44 of Rabipour et al. for reference to continuously determining the echo delay D(k) of a frame such that any change in network delay time do to a connection change is determined and signaled to the echo suppression device)**. Rabipour et al. does not disclose the informing occurring form a gateway device.

With respect to claims 15 and 16, Rabipour et al. discloses sending a message for switching off echo compensation, receiving the message, and switching off echo compensation **(See column 6 line 65 to column 7 line 11 and Figure 3 of Rabipour et al. for reference to determining that the delay is less than the threshold delay, sending a message to switch off echo compensation in response to the determination, and switching off echo suppression)**. Rabipour does not disclose the message being sent between control entities of gateways.

With respect to claims 17, 18, 25, and 26, Rabipour et al. does not disclose the packet network being an IP network or an ATM network.

With respect to claim 20, Rabipour et al. discloses a communication system for switching off an echo compensation for a connection **(See the abstract and Figure 3 of Rabipour et al. for reference to determining whether to perform echo suppression based on a delay time)**. Rabipour et al. also discloses monitoring a

transmission time of a packet when echo compensation is on **(See column 5 lines 29-44 of Rabipour et al. for reference to continuously determining the echo delay D(k) while echo suppression is active)**. Rabipour et al. further discloses informing a control device that the time fell below the threshold, and switching off the echo compensation **(See column 5 lines 29-44, column 6 line 65 to column 7 line 11, and Figure 3 of Rabipour et al. for reference to signaling the current echo delay time to a echo suppression device, comparing the current echo delay time to the threshold echo delay time and passing a current frame unchanged, meaning echo suppression has been turned off, if the current echo delay time is below the threshold echo delay time)**. Rabipour et al. does not disclose the system including a packet network with signaling between a gateway and a gateway control device including the gateway control device sending the threshold value to the gateway.

With respect to claim 23, Rabipour et al. does not disclose a gateway switching off the echo compensation.

With respect to claim 27, Rabipour et al. discloses a communication system for switching off an echo compensation for a connection **(See the abstract and Figure 3 of Rabipour et al. for reference to determining whether to perform echo suppression based on a delay time)**. Rabipour et al. also discloses monitoring a transmission time of a packet when echo compensation is on **(See column 5 lines 29-44 of Rabipour et al. for reference to continuously determining the echo delay D(k) while echo suppression is active)**. Rabipour et al. further discloses a control device **(See column 5 lines 29-44, column 6 line 65 to column 7 line 11, and Figure**

3 of Rabipour et al. for reference to signaling the current echo delay time to a echo suppression device, which is a control device). Rabipour et al. does not disclose the system including a packet network with signaling between a gateway and a gateway control device including the gateway control device sending the threshold value to the gateway.

With respect to claims 10, 11, 15-18, 20, 23, and 25-27, Kirla et al., in the field of communications, discloses performing an echo compensation method in a packet network environment including signaling between a gateway and a control device **(See the abstract, page 7 line 30 to page 8 line 32, page 11 line 26 to page 12 line 11, page 13 line 12 to page 14 line 14, and Figure 6 of Kirla et al. for reference to a packet network, which can be an IP network or an ATM network, including gateway devices 614 and 621 an echo compensating control devices 615 and 622 with the gateways determining a current delay through the packet network and sending the determined delay information to the echo compensating device to control the operation of the echo compensating device)**. Performing an echo compensation method in a packet network environment including signaling between a gateway and a control device had the advantage of allowing echo compensation techniques to improve the quality of voice calls routed through a packet network such as the Internet **(See the abstract for reference to optimizing the echo removing capability of an echo removing device to increase voice quality)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Kirla et al. to combine performing an echo

compensation method in a packet network environment including signaling between a gateway and a control device, as suggested by Kirla et al., with the system and method of echo compensation disclosed by Rabipour et al., with the motivation being to apply the echo compensation method to an environment known to gain benefits from echo compensation and to improve the quality of voice calls routed through a packet network such as the Internet.

With respect to claims 10, 20, and 27, although Rabipour et al. discloses the use of an echo threshold delay and Kirla et al. discloses signaling between a controller and a gateway to control echo removing, the combination of Rabipour et al. and Kirla et al. does not specifically disclose sending a threshold value from a gateway control device to a gateway. Tahernezhaadi et al., in the field of communications, discloses performing an echo compensation method in an Internet packet network environment including sending a threshold from a gateway control device to a gateway with the gateway controlling echo compensation **(See the abstract, column 4 lines 36-56, column 5 lines 41-60, column 6 line 17 to column 7 line 22, and Figures 2 and 5 of Tahernezhaadi et al. for reference to an Internet packet network, including network element 200, which is a gateway, implementing an echo compensating method that includes a threshold register 214, which is a gateway control device, sending an echo threshold, to a bypass control logic device 232 of the network element to control the operation of an echo canceller)**. Performing an echo compensation method in an Internet packet network environment including sending a threshold from a gateway control device to a gateway with the gateway controlling echo

compensation of allowing echo compensation techniques to improve speech quality of calls routed through a packet network such as the Internet **(See column 3 lines 9-14 of Tahernezhaadi et al. for reference to this advantage)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Tahernezhaadi et al. to combine performing an echo compensation method in an Internet packet network environment including sending a threshold from a gateway control device to a gateway with the gateway controlling echo compensation, as suggested by Tahernezhaadi et al., with the system and method of echo compensation disclosed by Rabipour et al. and Kirla et al., with the motivation being to apply the echo compensation method to an environment known to gain benefits from echo compensation and to improve the quality of voice calls routed through a packet network such as the Internet.

With respect to claim 12, Rabipour et al. does not disclose sending a value via an event in a real time protocol package of the media gateway control protocol.

With respect to claim 12, Kirla et al. discloses sending a value via an event in a real time protocol package of a media gateway control protocol **(See page 7 lines 7-16, page 17 lines 31-35, and Figure 3 of Kirla et al. for reference to using RTP and RTCP used to send messages from the gateway device)**. Sending a value via an event in a real time protocol package of a media gateway control protocol has the advantage of allowing echo compensation to be implemented with the currently available RTP transport protocols, such that a new protocol does not need to be created to implement echo compensation.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Kirla et al. to combine sending a value via an event in a real time protocol package of a media gateway control protocol, as suggested by Kirla et al., with the system and method of echo compensation disclosed by Rabipour et al., with the motivation being to allow echo compensation to be implemented with the currently available RTP transport protocols, such that a new protocol does not need to be created to implement echo compensation.

With respect to claims 13 and 24, Rabipour et al. does not specifically disclose using a round trip time of a message.

With respect to claims 13 and 24, Kirla et al. discloses using a round trip time of a message **(See page 11 line 26 to page 12 line 11 of Kirla et al. for reference to estimating round-trip delays of data packets)**. Using a round trip time of a message has the advantage of more accurately controlling an echo compensation device.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Kirla et al. to combine using a round trip time of a message, as suggested by Kirla et al., with the system and method of echo compensation disclosed by Rabipour et al., with the motivation being to more accurately control an echo compensation device.

With respect to claims 19, 21, and 28, Rabipour et al. discloses determining the data transmission time at predetermined intervals **(See column 3 lines 33-54 and column 5 lines 29-44 of Rabipour et al. for reference to continuously determining the echo delay D(k) of a frame for each 20ms time interval)**.

With respect to claims 22 and 29, Rabipour et al. does not disclose a connection change triggering the determining of a transmission time.

With respect to claims 22 and 29, Kirla et al. discloses a connection change triggering the determining of a transmission time **(See page 16 lines 5-18 of Kirla et al. for reference to a change in a connection triggering the request to determine a delay time)**. Using a connection change to trigger the determining of a transmission time has the advantage of updating echo compensation control when it is likely that the current echo compensation is not accurate.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Kirla et al. to combine using a connection change to trigger the determining of a transmission time, as suggested by Kirla et al., with the system and method of echo compensation disclosed by Rabipour et al., with the motivation being to update echo compensation control when it is likely that the current echo compensation is not accurate.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabipour et al. in view of Kirla et al. and Tahernezhaadi et al. and in further view of Vassiliou (U.S. Publication US 2002/0191589 A1).

With respect to claim 14, the combination of Rabipour et al., Kirla et al., and Nicholls et al. does not disclose sending a value via an MDCX media gateway control protocol message.

With respect to claim 14, Vassiliou discloses sending a value via an MDCX media gateway control protocol message **(See page 4 paragraph 44 of Vassiliou for reference to using an MDCX command to change parameters of a connection in a gateway)**. Sending a value via an MDCX media gateway control protocol message has the advantage of allowing echo compensation to be implemented with the currently available media gateway transport protocols, such that a new protocol does not need to be created to implement echo compensation.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Vassiliou to combine sending a value via an MDCX media gateway control protocol message, as suggested by Vassiliou, with the system and method of echo compensation disclosed by Rabipour et al., Kirla et al., and Nicholls et al., with the motivation being to allow echo compensation to be implemented with the currently available media gateway transport protocols, such that a new protocol does not need to be created to implement echo compensation.

Response to Arguments

5. Applicant's arguments with respect to claims 10-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason E Mattis
Examiner
Art Unit 2416

JEM

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